

CHIKHELIDZE, S.S.; TAVADZE, F.N., akademik, otv. red; AGLADZE, R.I., red.;
ARCHVADZE, Sh.R., red.; VACHNADZE, N.D., red.; GVELISIANI, G.G.,
red.; GUDZHEDZHIANI, B.I., red.; DZHANELIDZE, A.I., red.;
DZOTSENIDZE, G.S., red.; DURMISHIDZE, S.V., red.; KETSKHOVELI, N.N.,
red.; MIKELADZE, I.S., red.; RUBINSHTEYN, M.M., red.; TVALCHRELIDZE,
A.A., red.[deceased]; TSITSISHVILI, G.V., red.; SHENGELIYA, P.G.,
red.; FEDOT'YEV, K.M., red.izd-va; DOROKHINA, I.N., tekhn. red.

[Natural resources of the Georgian S.S.R.] Prirodnye resursy Gru-
zinskoi SSR. Moskva, Izd-vo Akad.nauk SSSR. Vol.3. [Mineral water]
Mineral'nye vody. 1961. 438 p. (MIRA 14:12)

1. Akademiya nauk Gruzinskoy SSR, Tiflis. Sovet po izucheniyu pro-
izvoditel'nykh sil. 2. Akademiya nauk Gruzinskoy SSR (for Tavadze).
(Georgia--Mineral water)

AGLADZE, R.I., IOSELIANI, O.S.

Reduction of Chiatura manganese oxide ores and slurries by means
of acid tars. Trudy Inst. prikl. khim. i elektrokhim. AN Gruz.
SSR 2:15-29 '61. (MIRA 16:8)

(Chiatura) (Manganese ores)

AGLADZE, R.I.; GOGISHVILI, N.Sh.

Stripping of Chiatura carbonate ores by percolation. Trudy Inst.
prikl. khim. i elektrokhim. AN Gruz. SSR 2:83-94 '61.
(MIRA 16:8)

(Chiatura--Ores)

(Percolation)

AGLADZE, R.I.; IONATAMISHVILI, T.V.; GVELESIANI, D.F.

Electrowinning of chromium from mother liquors after the
crystallization of chromium alums. Trudy Inst. prikl. khim. i
elektrokhim. AN Gruz. SSR 2:101-107 '61. (MIRA 16:8)

(Chromium compounds)

AGLADZE, R.I.; MAMPORIYA, G.Sh.

Nitration of electrolytic manganese. Trudy Inst. prikl. khim.
i elektrokhim. AN Gruz. SSR 2:177-187 '61. (MIRA 16:8)

(Manganese)

(Nitration)

Z/011/61/018/002/001/013
E112/E153

AUTHOR: Agladze, R.I.

TITLE: Production of dichromate by anodic dissolution of ferrochromium in alkaline and chromate solutions.

PERIODICAL: Chemie a chemická technologie. Přehled technické a hospodářské literatury. Vol.18, No.2, 1961, page 70. Abstract Ch 61-947 (Gidrometallurgiya khroma, 1959, pp.22-31, published by AN GSSR (AS Georgian SSR), Tbilisi)

TEXT: The possibility of producing sodium dichromate by an electrochemical or a combination of an electrochemical with a chemical process is discussed. The use of a chromate electrolyte, in place of an alkaline, in the electrochemical process of sodium dichromate production, improves the efficiency of anodic dissolution of ferrochromium and shortens the length of the process.

1 photograph, 2 sketches, 5 diagrams, 2 tables, 13 lit.references.

[Abstractor's note: This is a complete translation.]

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Z/011/61/018/002/002/013
E112/E153

AUTHORS: Agladze, R.I., and Ionatomishvili

TITLE: Preparation of ammonium dichromate and chromium-ammonium alums from ferrochromiums

PERIODICAL: Chemie a chemická technologie. Přehled technické a hospodářské literatury. Vol.18, No.2, 1961, page 70. Abstract Ch 61-948 (Gidrometallurgiya khroma, 1959, pp.33-50, published by AN GSSR (AS Georgian SSR), Tbilisi)

TEXT: The effect of different factors on the constants of the ammonium dichromate process by the anodic dissolution of ferrochromium is discussed. A flow sheet for a semitechnical production of ammonium dichromate, chromic oxide and ammonium-chromium alums is submitted.

2 photographs, 2 sketches, 8 diagrams, 4 tables, 10 lit.references.

[Abstractor's note: This is a complete translation.]

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25390
S/080/61/034/002/010/025
A057/A129

18.1275

AUTHOR: Agladze, R.I., Mamporiya, G.Sh.

TITLE: On thermal stability of nitrated electrolytic manganese

PERIODICAL: Zhurnal Prikladnoy Khimii, v 34, no 2, 1961, 345-350

TEXT: In the present work nitration of electrolytic manganese in ammonia and nitrogen gas was investigated and the effect of the nitration method and conditions on the thermal stability of the product were studied. Nitrated manganese is important for the production of austenitic stainless Cr/Mn steel. N.P. Chizhevskiy (Ref 6: ZhRMO, 2, 127-134 (1913)) first observed the reaction of manganese metal with gaseous nitrogen and ammonia. Since then nitration of manganese was investigated repeatedly, but thermal stability of the obtained products has not yet been studied. Saturation of electrolytic manganese with nitrogen was carried out in the present experiments in an apparatus presented in Fig 1. Electrolytic manganese of

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S/080/61/034/002/010/025
A057/A129

On thermal stability ...

the MPO OCT 6008-51 (MPO GOST 6008-51) type containing Mn 99.8%, S 0.08%, C 0.08% was used in 1 kg weights. The obtained results indicate (Fig 2) that maximum nitrogen content (14%) in manganese (using ammonia gas) is reached at 700°C in 12 hrs. Manganese alloys containing up to 6 weight % of nitrogen are ferromagnetic (ϵ -phase, Mn_4N), while above 6% nitrogen content they lose ferromagnetic properties.⁴ Results (Fig 3,4) obtained from experiments in nitrogen atmosphere indicate that at 900-950°C, holding time 1-2 hrs, and nitrogen consumption of 0.5-1 l/min a product containing 6.2 weight % of nitrogen is obtained. These results are in agreement with corresponding literature data. Thermal stability of the nitrated samples was determined by denitration, i.e., a method used for steel (Ref 12: V.I. Prosvirin, N.P. Agapova, "Azot v stali" ("Nitrogen in steel"), 5-31 (1950)) consisting in determination of the volume of gas removed by heating the nitrated manganese sample (Tab. 1). The liberated gas was collected and measured in the temperature interval of 700-1,300°C at each 100°C. After denitration the nitrogen content was determined by weighing the sample and by chemical analysis (Tab. 2). Discrepancies in results obtained by these two methods indicate that other impurities are also

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On thermal stability ...

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removed by heating. Denitration isotherms (Fig. 6-8) indicate that the amount of absorbed nitrogen depends on temperature and duration of the nitration process. Comparing the isotherms "gas volume versus time" it can be seen that thermal stability of the product depends on nitration conditions. Nitration of manganese at 1,000°C is identical in nitrogen and ammonia atmosphere, but according to the denitration results (Fig. 7,8) nitration in nitrogen atmosphere is more appropriate. Manganese nitrated at the high temperature of 1,000°C is thermally more stable than the product obtained in nitration of 700°C. There are 9 figures, 2 tables and 12 references: 7 Soviet-bloc and 5 non-Soviet-bloc. The three English-language publications read as follows: V.F. Zackay et al, Trans. ASM, 48, 509 (1956), E.G. Whittenberger et al, Metals. Trans. AIME, 7,889 (1957), M. Hansen, Constitution of binary alloys, N.Y., Toronto, London (1958).

SUBMITTED: March 19, 1960

Card 3/9

AGLADZE, R.I.; MUDZHIRI, Ya.N.; TOPCHIASHVILI, L.I.

Effect of the composition of a ferromanganese anode on the
production of potassium permanganate. Zhur.prikl.khim.
34 no.8:1786-1793 Ag '61. (MIRA 14:8)

(Potassium permanganate)
(Electrochemistry)

AGLADZE, R.I.; KVARATSKHELIYA, R.K.

Electrosynthesis of hydroxylamine sulfate in 20% sulfuric acid.
Khim.prom. no.1:37-40 Ja '62. (MIRA 15:1)
(Hydroxylamine)

AGLADZE, R.I.; GDZELISHVILI, M.Ya.

Preparation of hydrogen and potassium permanganate by the
anodic solution of ferromanganese. Trudy Inst.prikl.khim.1
elektrokhim.AN Gruz.SSR 3:3-11 '62. (MIRA 16:1)
(Hydrogen) (Rustavi—Potassium permanganate)
(Ferromanganese)

GDZELISHVILI, M.Ya.; AGLADZE, R.I.

Effect of silicon and potassium chloride on the production of
potassium permanganate by electrolysis. Trudy Inst.prikl.
khim.i elektrokhim.AN Gruz.SSR 3:13-26 '62. (MIRA 16:1)
(Rustavi--Potassium permanganate) (Ferromanganese)
(Electrolysis)

DOMANSKAYA, G.M.; AGLADZE, R.I.

Electric conductance of alkaline electrolytes used in
permanganate production. Trudy Inst.prikl.khim.i elektrokhim.
AN Gruz.SSR 3:39-47 '62. (MIRA 16:1)
(Alkalies—Electric properties) (Alkali metal permanganates)

S/081/62/000/003/046/090
B156/B101

18 1200
AUTHORS:

Agladze, R. I., Gogishvili, N. Sh.

TITLE:

Production of antimony-manganese alloy by electrolysis of molten salts

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 3, 1962, 368, abstract 3K154. (Tr. Gruz. politekhn. in-t, no. 4 (65), 1959, 101-115)

TEXT: The process of producing Sb-Mn alloys (10-49.3% Mn) from molten $\text{MnCl}_2 + \text{KCl} + \text{BaCl}_2$ is investigated; the cathode is molten metallic Sb (99.87% Sb). It has been found that increasing cathodic current density from 0.25 to 1 a/dm² is accompanied by a decrease of the cathodic current yield from 93 to 77% (temperature 850°C), from 95 to 80% (900°C), and from 97 to 90% (950°C). Under these conditions, the Mn content of the alloy is 23-31%. Increase in the Mn content of the alloy from 10 to 49.3% is accompanied by a decrease of the cathodic current yield from 95 to 90%.
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Production of antimony-manganese alloy ... S/081/62/000/003/046/090
B156/B101

The structures of the alloys produced have been investigated, and it has been found that the structure of alloys containing 28-31.1% Mn is characteristic of δ -phase. Alloys with >40% Mn contain chemical compounds. [Abstracter's note: Complete translation.]

Card 2/2

AGLADZE, R.I., akademik; LEZHAVA, T.I.

Production of graphite and electrolytic iron in the anodic dissolution of cast iron. Soob. AN Gruz. SSR 29 no.1:39-44 J1 '62.
(MIRA 18:5)

1. Institut prikladnoy khimii i elektrokhemii AN GruzSSR, Tbilisi. 2. AN GruzSSR (for Agladze).

AGLADZ, N. I.

"The production of permanganate of potassium in USSR".

Report presented at the Intervuz Conference on Electrodeposition of Nonferrous Metals, Ural Polytechnical Institute im S. M. Kirov, Sverdlovsk, held from 27-30 May 1963.

(Reported in Tsvetnyye Metally, No. 10, 1963, pp. 82-84)
JPRS 24,651 19 May 1964

S/064/63/000/001/004/007
B101/B186AUTHORS: Agladze, R. I., Kvartskheliya, R. K.TITLE: Effect of the cathode material and composition of electrolyte
on the electrosynthesis of hydroxylamine sulfate

PERIODICAL: Khimicheskaya promyshlennost', no. 1, 1963, 48 - 52

TEXT: The current yield of NH_2OH and NH_3 on various cathodes was determined during the electroreduction of HNO_3 in 20 % H_2SO_4 at 24 a/dm², 18°C, and 60 g/l HNO_3 . The following yield percentage was obtained (first figure % hydroxylamine, second figure % ammonia) for Cu: 0, 70; Pb: 0, 60.5; Sn: 58.6, 27.7; graphite: 32.1, 45.2; Al: 0, 32.9 %; Pt: 0, 6.1; Cr: 0, 41.6; Mo: 0, 26.8; Ta: 0, 24.4; W: 0, 51.8; Fe: 0, 68.1; Co: 24.4, 65.5; Ni: 19.2, 44.1; Cd: 30.5, 79.0; Zn: 51.0, 108.2; Cu amalgamated: 80.1, 3.5; Sn amalgamated: 64.3, 2.2; Pb amalgamated: 70.0, 1.6; Al amalgamated: 70.0, 3.4; Zn amalgamated: 71.4, 0.8, and Hg: 86.0, 0. The high yields obtained for Zn and Cd are due to an additional reduction of HNO_3 .

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Effect of the cathode material ...

S/064/63/000/001/004/007
B101/B186

by the metal. The polarization curves of the Pb and Sn cathodes in 20 % H_2SO_4 showed stages whose height depended on the HNO_3 concentration and which were especially pronounced at 60 g/l of HNO_3 . The cathode starts to dissolve in the inflexion range, whereas in the range following that, the metal is protected cathodically and the potential corresponds to HNO_3 reduction. In the $HNO_3 - H_2SO_4 - H_2O$ system, compositions involving the formation of NH_2OH were studied. Results: Hydroxylamine forms at maximum concentrations of HNO_3 : 13.22 or 11.6 %, H_2SO_4 : 0.08 or 31.9 %, and a water content of 86.7 or 56.5 %. Between 10 and 77 % H_2SO_4 , HNO_3 is reduced into NH_2OH also at a very low HNO_3 concentration. The formation of hydroxylamine is possible also in the system $HNO_3 - H_2O$ at 98.6 % H_2O and 1.4 % HNO_3 , and also at 86.5 % H_2O and 13.5 % HNO_3 . On the basis of the experimental data, a large laboratory electrolyzer allowing the use of 100 - 200 a (Fig. 7) was built. A vinyplast cylinder (1) has ring-shaped vinyplast supports (2) containing Hg (3) welded to it. A tinned Card 2/3

Effect of the cathode material ...

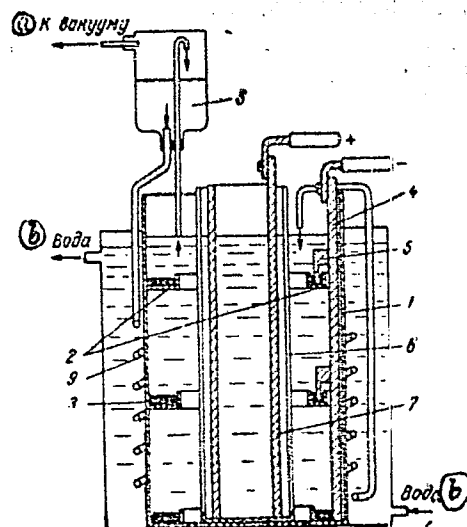
S/064/63/000/001/004/007
B101/B186

steel rod (4) is used for current supply. Angle brackets (5) dipping in the mercury are welded to. 4 and 5 are insulated with viniplast. The anode (7) is fixed within the diaphragm (6). For cooling, the catholyte is drawn into the vessel 8 by a vacuum (a) and is thence conducted back into the electrolyzer via coils (9) through which flowing water circulates. There are 7 figures and 1 table.

Fig. 7. Large lab electrolyzer for the production of hydroxylamine sulfate.

Fig. 7

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S/279/63/000/001/007/023
E021/E452

AUTHORS: Rubesh, L.L., Gvelosiani, Dzh.F., Agladze, R.I.,
Akimenko, V.B. (Tbilisi)

TITLE: The anodic dissolution of ferrochrome

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye
tekhnicheskikh nauk. Metallurgiya i gornoye delo.
no.1, 1963, 100-104

TEXT: . The influence of the iron, carbon (0 to 7%) and silicon (0 to 2.8%) contents on the anodic dissolution of chromium was investigated. The starting materials were electrolytic chromium, Armco iron, active carbon and metallic silicon. Cylindrical anodes were cast from a high frequency induction furnace into metallic moulds 50 to 60 mm long x 30 mm diameter. Electrolysis was carried out with anodic and cathodic current densities of 10 and 7 A/dm² respectively, electrolyte concentration 50 g/litre (NH₄)₂Cr₂O₇ (20 g/litre Cr⁶⁺), pH 6 to 6.5 and temperature 60 ± 1°C. The iron and chromium hydroxide precipitates were dissolved by adding concentrated sulphuric acid, and Cr⁶⁺, Cr³⁺ and Fe³⁺ were determined. With increase in iron
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The anodic dissolution ...

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E021/E452

content the proportion of current used to form Cr^{6+} and Cr^{3+} decreased whilst that for Fe^{3+} increased. The ratio of Cr^{6+} to Cr^{3+} remained constant. The overall current efficiency with iron contents of up to 35 to 40% was 100%; further increase in iron content reduced the overall current efficiency below 100%, due to evolution of oxygen and increased anode passivation. There was a sharp increase in current used to form Cr^{3+} and a decrease in that forming Cr^{6+} with increase in carbon content. The total current used to form Cr^{6+} , Cr^{3+} and Fe^{3+} fell with increase in anode carbon content, and CO_2 and CO were shown to be present in the anode gases. The effects of Si on anodic dissolution were similar to those of carbon but less marked. There are 3 figures.

SUBMITTED: August 4, 1962

Card 2/2

"On some questions of cathodic separation and anodic dissolving of manganese and its alloys in various media."

report submitted for 10th Anniv Festivities, Leuna-Merseburg Tech Inst for Chemistry, Leuna-Merseburg, E. Germany, 2-7 Nov 64.

AGLADZE, R.I., akademik; LEZHAVA, T.I.

Electrosylis of solutions containing iron and manganese
sulfates. Soob. AN Gruz.SSR 33 no.3:579-584 Mr '64
(MIRA 17:8)

1. Akademiya nauk Gruzinskoy SSR (for Agladze).

AGLADZE, R.I., akademik; MAMPORIYA, G.Sh.; TOPCHIASHVILI, L.I.

Chemical stability of manganese nitride. Soob. AN Gruz. SSR 35
no.3:593-606 S '64. (MIRA 17:11)

1. Institut prikladnoy khimii i elektrokhemii AN GruzSSR.
2. Akademiya nauk Gruzinskoy SSR (for Agladze).

AGLADZE, R.I., akademik

Seminar on the electrochemistry of manganese and related metals.
Zhur, VHKO 10 no.3:344-345 '65. (MIRA 18:8)

1. Akademiya nauk Gruzinskoy SSR.

AGLADZE, R.I., akademik; PETRIASHVILI, L.D.

Electrochemical oxidation of potassium manganate to permanganate by means of soluble ferromanganese anodes. Soob. AN Gruz. SSR 39 no.1:93-100 J1 '65. (MIRA 18:10)

1. Akademiya nauk Gruzinskoy SSR (for Agladze).

GOGISIVILI, N.Sh.; AGLADZE, R.I., akademik

Effect of germanium ions on the electrodeposition of manganese.
Soob. AN Gruz. SSR 40 no.1:105-111 O '65.

(MIRA 18:12)

1. Institut neorganicheskoy khimii i elektrokhemii AN Gruzinskoy
SSR. Submitted December 28, 1964.

ACC NR: AP5024634

SOURCE CODE: UR/0048/65/029/009/1686/1689

AUTHOR: Aglamazov, V.A.; Khazaradze, N.G.; Burduli, A.Y.; Gedevarishvili, L.D.;
Kokhodze, L. Sh.; Ponezhev, M.Kh.; Sakvarelidze, I.I.

ORG: none

TITLE: On fluctuations in the lateral distribution of muons in extensive air showers
/Report, All-Union Conference on Cosmic Ray Physics held at Apatity 24-31 August 1964/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 29, no. 9, 1965, 1686-1689

TOPIC TAGS: secondary cosmic ray, muon, extensive air shower, particle distribution

ABSTRACT: The authors have investigated the lateral distribution of penetrating particles accompanying extensive air showers. The showers were detected by three 0.07 m² scintillation counters at the vertices of an isosceles right triangle having 10 m legs. The position and direction of the shower axis were determined with the aid of six trays of Geiger counters located at the vertices and at the centers of the 70 m sides of an equilateral triangle. The penetrating particle detector was located 200 m.w.e. below the center of the surface assembly and comprised six systems of two 0.5 m² trays of 15 counters each, the two trays of each system being separated by 15 cm of lead. In order to avoid errors due to delta electrons, triggering of two adjacent counters was always ascribed to passage of a single penetrating particle. Data on over 10⁴ showers with

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ACC NR: AP5024634

total number of particles ranging from 5×10^4 to 5×10^6 are tabulated. The lateral distribution of penetrating particles was found to be in good agreement with the formula of S.Bennet and K.Greisen (Physl Rev., 124, 6, 1961). Many more cases were observed in which two or more (up to 5) penetrating particles were recorded in a single shower than can be accounted for by random fluctuations, considering the low flux of penetrating particles and the small area of the detector. It is concluded that correlated groups of muons occur in the column of an extensive air shower, and it is suggested that these may be due to fluctuations in the elementary interaction of ultrahigh energy nucleons. The relation between the frequency of coincidences in the penetrating particle detector and the distance between the two counters involved was in good agreement with that found by L.D.Gedevanishvili and I.I.Sakvarelidze (Soobshcheniya AN GruzSSR, 32, No.2, 297, 1963). In conclusion, the authors express their gratitude to E.L.Andronikavshvili for his guidance of the work, and to M.F.Bibilashvili, R.E.Kazarov, G.Ye.Chikovani, A.K.Dzhavrisvili, and I.V.Khaldeyeva for assistance with the work. Orig. art. has: 1 formula and 3 figures.

SUB CODE: NP/ S UBM DATE: 00/

ORIG REF: 001/ OTH REF: 001

Cord 2/2

ALLAKHVERDYAN, D.A., prof.; AMINOV, A.M., doktor ekon. nauk; AGLAS, M.S., prof.; D'YACHENKO, V.V., dots.; ZLOBIN, I.D., prof.; KADYSHEV, L.A., dots.; KARNAUKHOVA, Ye.S., prof.; KOTOV, G.G., prof.; LEVITANUS, I.M., dots.; LIVSHITS, A.L., dots.; LYAPIN, A.P., prof.; MAKAROVA, M.F., prof.; MASLOV, P.P., prof.; SONIN, M.Ya., doktor ekon.nauk; SOROKIN, G.M.; STRUMILIN, S.G., akademik; TUMANOVA, L.V., dots.; TUROVTSEV, V.I., dots.; FIGURNOV, P.K., prof.; MOKHOVA, N.I., dots., red.; SHCHERBAKOVA, V.V., dots., red.; SHVEYTSEV, Ye.K., red.; MURASHOVA, V.A., takhn. red.

[The economics of socialism] Politicheskaya ekonomiya sotsializma. Izd.2., perer. Moskva, Gos.izd-vo "Vysshaya shkola," 1962. 614 p. (MIRA 16:3)

1. Chlen-korrespondent Akademii nauk SSSR (for Sorokin).
(Economics) (Communism)

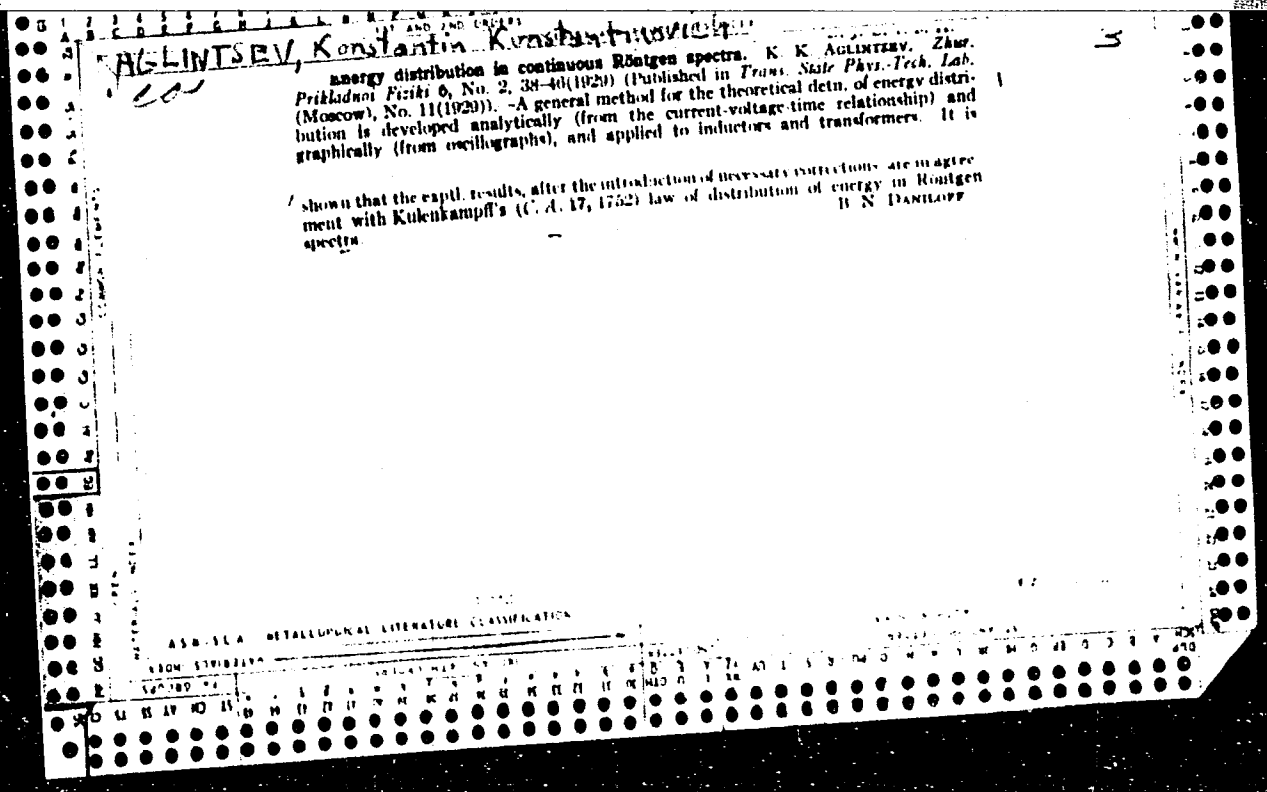
AGLIN, Anatoliy Nikolayevich, kand. 1st. nauk; MIKHAYLOV, S.S., red.;
MOSTOVETS, N.V., red.; NAYDENOV, V.I., red.; FOKINA, G., red.;
KONOVALOVA, L., tekhn. red.

[The humdrum and struggles of Brazil] Budni i bitvy Brazili.
Moskva, Gspolitizdat, 1963. 126 p. (MIRA 16:3)
(Brazil—Politics and government)
(Brazil—Social conditions)

AGLINTSEV, K.K.; SMIRNOV, V.V.; CHUBAROV, M.N.

Investigating the sensitivity of "Roentgen-X" and "Roentgen-XX"
films to electrons. Zhur.nauch.i prikl.fot.i kin. 7 no.6:444-446
N-D '62. (MIRA 15:12)

1. Radiyevyy institut AN SSSR imeni V.G. Khlopina.
(Radiography)
(Photographic sensitometry)



COMMON CATALOG

COMMON CATALOG

The work function and the energy distribution in a continuous x-ray spectrum. K. Aglintzev. *J. Exptl. Theoret. Phys.* (U. S. S. R.) 3, 282-02 (1933); cf. *C. A.* 25, 1435.—The exptl. results for the measurements of the heating action and ionization action of x-rays were examined, and a method for the parallel calcn. of the work of ionization and the energy distribution in the spectrum was developed. In the region from 0.10 to 0.50 Å, the work of ionization has a const. value of 37 v. Tables are given showing (1) the ionization in e. s. u. per cc. per sec. and the energy passing through 1 sq. cm. cross section of the beam per sec. for 140 kv. x-rays after going through various filters; (2) the absorption coeffs. of the various filters and of air for wave lengths from 0.10 to 0.50 Å; (3) the values of $I(\lambda)$, the intensity of the x-rays between λ and $\lambda + d\lambda$ and also of $I\lambda/d\lambda$ (where λ is the work of ionization) from 0.10 to 0.50 Å. A graph is given showing the energy distribution of 140 kv. x-rays for the same range of wave length.

M. Goyer

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ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

SECTION 1: 1-1000

SECTION 2: 1001-2000

SECTION 3: 2001-3000

SECTION 4: 3001-4000

SECTION 5: 4001-5000

SECTION 6: 5001-6000

SECTION 7: 6001-7000

SECTION 8: 7001-8000

SECTION 9: 8001-9000

SECTION 10: 9001-10000

SECTION 11: 10001-11000

SECTION 12: 11001-12000

SECTION 13: 12001-13000

SECTION 14: 13001-14000

SECTION 15: 14001-15000

SECTION 16: 15001-16000

SECTION 17: 16001-17000

SECTION 18: 17001-18000

SECTION 19: 18001-19000

SECTION 20: 19001-20000

AGLINTSEV, K.K.

Analysis of the ionic regimen in the ionization chambers.
K. K. Aglintsev. *Trudy Vsesoyuz. Nauch. Issledovatel. Inst. Metrol.* No. 17, 9-30 (in French 30) (1958). The method for measuring the instantaneous values of the strength of the x-rays and of the intensity of current in the ionization chamber, by the application of the oscillograph is described. These values are obtained under different conditions of current supply to the x-ray tube and with different elec. fields in the ionization chamber. The method for measuring the relation between the intensity of current and time under the conditions of variable strength of the ionizer, which is based on the consideration of speed of the ion movements, is also described, and the equation $dI_0 = 4\pi(u_0 + v_0)C \int A(t)dt$, was used for the calculation, where I_0 is the current intensity, u_0 and v_0 are speeds of pos. and neg. charges, C is total capacity, t p.d., and $A(t)$ a function, which is proportional to the instantaneous value of the ionizer strength producing no. of ion pairs per unit vol. of the chamber, and called an "ionizing impulse." The results calcd. by this equation are confirmed sufficiently by the expl. data obtained.

Metallurgical Literature Classification

AGLINTSEV, K.K.

Determination of the form of the current-potential difference curve in x-ray tubes by ionization measurements. (Preliminary report). K. K. Aglutsev. *Trudy Fizmat. Akad. Nauk. Izdat. Inst. Metrol.* No. 17, 38-40 (1938); cf. preceding abstr. The method is based on the analysis of oscillograms of the ionizing current obtained by passing x-rays through the ionizing chamber. Since the form of curve of ionizing current is detd. by the law of change of the strength of radiation with time and by the conditions of ion movement in the ionization chamber, and since the form of ionizing current curve with an in-

crease of voltage approaches the form of curve of variable strength of the ionizer, it is not difficult to construct the ionizing current curve, which is only slightly different from that of the change of strength of ionizer in time. Transition from this curve to the curve of high tension which is used for the x-ray tube, should be carried out by obtaining a 2nd oscillogram of the ionizing current under the same conditions but using an addnl. filter. For the construction of the voltage curve, it is necessary to recalc. the obtained strength of filtered and unfiltered radiation, to the generation voltage by means of the curve: generation voltage vs. the percentage of absorption by an addnl. filter. The current curve can be constructed by recalc. of the ionization-voltage curve, because at the given quality of radiation, the strength is proportional to the current strength in the x-ray tube. A. A. Podgorny.

ASB 51.4 DETAILING LITERATURE CLASSIFICATION

AGLINTSEY, K.K.

3

1. Dosimetric investigation by means of the cuprous oxide photoelements. K. K. Aglintsey, *Izvest. Vsesoyuz. Nauch. Issledovatel. Inst. Metal.* No. 17, 58-62, 1938.

The Cu₂O photoelements cannot be used for practical dosimetry at least in the region of wave length of 0.1-1.0 μ .

A. A. Polgorny

ASB 56A METALLURGICAL LITERATURE CLASSIFICATION

[illegible]

USSR/Physics
Ionization
Ionization Chambers

Dec 1946

"The Relationship between the Intensity of
Saturating Current and the Electric Fields in
Ionization Chambers During Volume Ionization,"
K. K. Aglintsev, 6 pp

"Zhur Tekh Fiz" Vol XVI, No 10

This article discusses the relationship between
the intensity of the ionizing agent, X-rays or
gamma rays, and the potential difference which
must be applied to the ionization chamber to
guarantee saturation during measurement of the
ID 26r86

USSR/Physics (Contd) Dec 1946

ionizing current. The degree of potential differ-
ence can be easily established by experimental
means.

ID

26r86

PHASE I TREASURE ISLAND BIBLIOGRAPHICAL REPORT AID 676 - I

BOOK Call No.: QC786.A4

Author: AGLINTSEV, K. K.
Full Title: DOSIMETRY OF IONIZING RADIATION. (RADIOACTIVITY MEASURE-
MENT. X-RAY AND GAMMA-RAY MEASUREMENT)
Transliterated Title: Dozimetriya ioniziruyushchikh izlucheniya.
(Radiometriya i rentgenometriya)

PUBLISHING DATA

Originating Agency: None

Publishing House: State Publishing House of Technical and Theoretical
Literature ("Gostekhizdat")

Date: 1950

No. pp.: 500

No. of copies: 3,000

Editorial Staff: None

PURPOSE: The monograph is intended for physicists, engineers and students
working in the field of dosimetry. Some problems discussed here
might be useful for biologists and physicians.

TEXT DATA

Coverage: According to the author, this is the first comprehensive
monograph examining dosimetry as a whole. Ch. 1-3 discuss the
physical laws upon which dosimetry is based. Ch. 4-7 describe the
fundamental radiation-measuring methods (electrometers, special
electron tubes, ionization chambers and counters). Ch. 8-11 deal
with radiation-measuring instruments, dosimeters and roentgenometers,

1/2

Dozimetriya ioniziruyushchikh izlucheniye.
(Radiometriya i rentgenometriya)

AID 676 - I

including those of Ya. L. Shekhtman and I. V. Poroykov. The author is one of the most prominent Soviet scientific workers in this field. Ch. 12 contains new data on the dosimetry of neutron flux, and presents the theory, techniques and results of experiments. Ch. 13-20 discuss the practical application of dosimetry. Ch. 21 presents some works in the field of the biological effects of radiation. It contains new calculations and measurements of the safe flux of slow neutrons. Radiation effects on the living organism and therapeutical application of rays, as well as biological dosimetry, are discussed. Ch. 22 is dedicated to problems of radiation-shielding. Shields and shielding materials for protection against X-ray, gamma-ray and neutron sources are examined. Although the author says that special attention is given to works by Soviet scientists, his references are predominantly non-Russian. The book is provided with many tables, diagrams and equations.

No. of References: 177, mostly non-Russian (1927-1949)
Facilities: None

2/2

USSR.

Smirnov, Zhur. Izv. Akad. Nauk SSSR, Ser. Fiz. Khim., 1987, No. 1, p. 100-101.
Sensitivity of Agay film type X and XX toward γ -rays from Cr^{54} , Zr^{95} , Cs^{137} , and Co^{60} was experimentally detd.
Blackening is owing to excitation of silver halide grains by γ -rays and to the formation of silver clusters.

✓ Photographic effect of x-rays. *K. K. Arinitsky. Zhur.*
Tekhn. Fiz. 23. 1734-6 (1953). — To determine the change in
spectral sensitivity of a photographic plate under the action of
x-rays. It is shown that the spectral sensitivity of a photographic
plate under the action of x-rays is not constant. It is shown that
electron emission in AgBr is not constant.

4
0

AGLINTSEV, K.K.

Errors in measurement results. Trudy VNIIM no.24:5-7 '54.
(Errors, Theory of) (Mensuration) (MIRA 10:12)

AGLINTSEV, K.K.

IOFFE, A.F.; LEBEDEV, A.A.; FOK, V.A.; STARIK, I.Ye.; KONSTANTINOV, B.P.;
DZHELEPOV, B.S.; PERFILOV, N.A.; DOBRETISOV, L.N.; STARODUBTSEV, A.V;
NEMILOV, Yu.A.; ZHDANOV, A.P.; MURIN, A.N.; AGLINTSEV, K.K.; TSARE-
VA, T.V.; SHUL'MAN, A.R.; YEREMEYEV, M.A. ~~XXXXXXXXXXXX~~

P.I. Lukirskii; obituary. Vest. AN SSSR 24 no.12:62 D '54. (MIRA 8:1)
(Lukirskii, Petr Ivanovich, 1894-1954)

AGLINTSEV, K. K.
USSR/Physics - Instruments

Card 1/1 Pub. 22 - 9/48

Authors : Aglintsev, K. K., and Khol'nova, E. A.

Title : Calorimetric measurement of activity and number of gamma-quanta per act of decomposition

Periodical : Dok. AN SSSR 98/3, 357-360, Sep 21, 1954

Abstract : The construction and application of two types of calorimeters, intended for absolute measurements of beta- and gamma radiation intensities of radioactive substances, are described. The technical details and mode of operation of the gamma- and beta-calorimeters are listed. The suitability of the calorimetric method, for the determination of numbers of gamma quanta per act of decomposition, is explained. A calculation method, capable of determining the fraction of gamma-ray energy absorbed in the calorimeter, is presented. Four references: 3-USA and 1-USSR (1948-1952). Table; drawings; graph.

Institution : The D. I. Mendeleyev All-Union Scientific Research Institute of Metrology

Presented by : Academician P. I. Lukirskiy, April 26, 1954

GORSHKOV, Georgiy Vasil'yevich, professor; AGLINTSEV, K.K., professor, redaktor,
KELAREV, L.A., redaktor; IVANOVA, A.E., tekhnicheskij redaktor.

[Gamma radiation of radioactive bodies] Gamma-izluchenie radioaktivnykh
tel. Leningrad Isd-vo Leningradskogo univ., 1956. 137 p. (MLRA 9:5)
(Gamma rays)

USSR / Isotopes.

B-7

Abs Jour : Ref Zhur - Khimiya, No 8, 1957, 26057

Author : K.K. Aplintsev, F.M. Karavayev, A.A. Konstantinov, G.P. Ostromukhova, Ye.A. Khol'nova.

Inst : All-Union Scientific Research Institute of Metrology
Title : Standardization of Radioactive Preparations.

Orig Pub : Atom energiya, 1956, No 2, 55 - 62

Abstract : Methods and apparatus used at the All-Union Scientific Research Institute of Metrology for the measurement of the monitoring characteristics of radioactive preparations are described. The measurement of the γ -equivalent is done with two calibrated installations consisting of ionization chambers and electrometric appliances; one of these installations is reserved for measuring the γ -equivalents of 1 to 1,000 mg-equ. of Ra with the accuracy of from 1 to 8%. Absolute activity measurements are carried out by counters with solid angles of 4π (the measurement limit is from 5×10^{-7} to 5×10^{-11} curie) with

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AGLINTSEV, K. K.

Category: USSR/Fitting Out of Laboratories. Instruments, Their Theory, H.
Construction and Use.

Abs Jour: Referat Zhur-Khimiya, No 9, 1957, 31157

Author : Aglintsev K. K.

Inst : not given

Title : Standards and Standard Methods of Measurement of Ionizing
Radiations.

Orig Pub: Izmerit. tekhnika, 1956, No 4, 21-24

Abstract: Consideration of problems relating to standard measurements of activity and dosage. The possibility, in principle, is shown of providing a standard corresponding to a Curie unit (by means of Pu ²³⁹), whereas an exact reproduction of a roentgen by means of a standard emitter, is not possible. Also considered are the procedures of transfer of correct value of magnitude of measurement unit from standard or standard setting to sample and working measures for different kinds of radiations.

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APPROVED FOR RELEASE: 06/05/2000

CIA-RDP86-00513R000100520009-4"

AGLINTSEV, K. K., KASATKIN, V. P. and SMILGINS, V. V.

"Investigations of functioning electronic spectra in the dosimetry of β - and γ -radiations," a paper submitted at the International Conference on Radioisotopes in Scientific Research, Paris, 9-20 Sep 57.

AGLINTSOV, A.A.

"Dosimetric Characteristics of Radioactive Preparations". p.70

Trudy Vsesoyuznoy konferentsii po Meditsinskoy Radiologii
(Voprosy Gigieny i Dozimetrii) Medgiz, 1957, Moscow Russian, bk.

Proceedings of the All-Union Conference on Medical Radiology
(Hygienic and Dosimetric Problems).

AGLINTSEV, K. K.

AF 1154484

Akademiya nauk SSSR. Otdeleniye fiziko-matematicheskikh nauk

Issledovaniya v oblasti dozimetrii ioniziruyushchikh izlucheniye; sbornik statey (Studies in the Dosimetry of Ionizing Radiation; Collection of Articles) Moscow, Izd-vo AN SSSR, 1957, 191 p., 6,000 copies

Ed.: Aglintsev, K. K., Dr. of Tech. Sciences; Ed. of Publishing House: Kuznetsova, Ye. B., Tech. Ed.: Kiseleva, A. B.

PURPOSE: Not stated

COVERAGE: This is a collection of articles on the absolute measurement of β -active substances, on scintillation methods, apparatus for individual control, technique of dosage measurement, and on the calculation of maximum permissible levels of external radiation. These papers were prepared between 1950 and 1954. Some of them were presented at the 1954 Conference on Dosimetry organized by the Academy of Sciences of the USSR.

Card 1/8

AF 1154484

Studies in the Dosimetry of Ionizing Radiation; Collection of Articles)
Moscow, Izd-vo AN SSSR, 1957, 191 p., 6,000 copies

TABLE OF CONTENTS:

Keirim-Markus, I. B.; L'vova, M. A.

Absolute Measurement of the Activity of Beta-radiation Sources by Means of
an End-window Counter. Part I (Metod absolyutnykh izmereniy aktivnosti
istochnikov beta-izlucheniya s pomoshchyu tortsovykh schetchikov.
(Soobshcheniye 1)

3-37

There are 18 figures, 3 tables, and 51 references, 6 of which are USSR.

Antonova, I. A.

Absolute Measurement of Beta Radiation by Means of Small Ionization
Chambers (Absolyutnyye izmereniya beta-aktivnosti metodom mal'kh ion-
izatsionnykh kamer)

72-81

There are 5 figures, 1 table, and 10 references, 7 of which are USSR.

Card 2/8

AF 1154484

Studies in the Dosimetry of Ionizing Radiation; Collection of Articles (Cont.)

Rozman, I. M.; Tsimmer, K. G.

Use of Scintillation Counters in Dosimetry (O primeneni stsintillyatorov
v dozimetrii)

82-89

There are 50 references, 5 of which are USSR.

Rozman, I. M.; Tsimmer, K. G.

Luminescent Isodose Recorder (lyuminestsentnyy izodozograf)

90-97

There are 8 figures, 2 tables, and 11 references, 3 of which are USSR.

Konstantinov, I. Ye.

Experimental Data on Luminescent Dosimetry of Gamma Radiation (Eksperi-
mental'nyye dannyye po lyuminestsentnomu metodu dozimetrii gamma-izluche-
niya)

98-101

There are 3 figures, 1 table, and 6 references, 1 of which is USSR.

Card 3/8

AF 1154484

Studies in the Dosimetry of Ionizing Radiation; Collection of Articles (Cont.)

Amiragova, M. I.; Busygin, V. Ye.; Shtukkenberg, Yu. M.

Pocket Gamma-Dosimeters (Pokazyvayushchiye karmannyye gamma-dozimetry) 102-111

There are 12 figures, and no references.

Ardenne, M.; Yeger, G.; Isayev, B.; Roggenbuk, V.; Froylikh, G.

Pocket Gamma-Radiation Dosimeter (Karmanny dozimetr gamma-izlucheniya) 112-114

Dittval'd, G.; Vestmayer, G.; Vovk, Z.; Gorizontov, B.; Goffman, V.;
Zrokke ; Frank, E.; and Fyuksel', G.; participated in this work.
There are 3 figures and 2 USSR references.

Card 4/8

AF 1154484

Studies in the Dosimetry of Ionizing Radiation; Collection of Articles (Cont.)

Pavlov, A. A.; Rozman, I. M.; Tsimmer, K. G.

Device for Individual Dosimetric Monitoring (Pribor dlya individual'nogo dozimetricheskogo kontrolya)

115-120

There are 3 figures, 1 table, and 10 references, 2 of which are USSR.

Levochkin, F. K.

Pocket Gamma-Counter (Karmanny gamma-indikator)

121

There is 1 figure and no references.

Nikitin, N. S.; Frolov, V. V.

Improved Method for Individual Photocontrol of Gamma Contamination.
(IFK-II) (Usovershenstvovanny metod individual'nogo fotokontrolya
gamma-vrednosti (ИФК-II)

122-134

There are 9 figures and 6 references, 3 of which are USSR.

Card 5/8

AF 1154484

Studies in the Dosimetry of Ionizing Radiation; Collection of Articles (Cont.)

Shtukkenberg, Yu. M.; Kalugin, K. S.; Bobkov, A. I.

Electric Precipitator for the Determination of Active Aerosol Concentrations (Elektrofil'tr dlya opredeleniya kontsentratsii aktivnykh aerorozley)

132-153

There are 13 figures, 2 tables, and 17 references, 3 of which are USSR.

Popov, V. I.

Measurement of Small Concentrations of alpha sources in Water by Means of the Diffusion Wilson Chamber (Izmereniye malykh kontsentratsiy al'fa-aktivnykh veshchestv v vode s pomoshch'yu diffuzionnoy kamery Vil'sona) 154-161

There are 5 figures and 14 references, none of which are USSR.

Card 6/8

AF 1154484

Studies in the Dosimetry of Ionizing Radiation; Collection of Articles (Cont.)

Andreyeshchev, Ye. A.; Isayev, B. M.; Mel'nikov, I. F.

Spark Counter for the Control of Alpha Contamination of a Surface
(Iskrovoy schetchik dlya kontrolya zarazhennosti poverkhnostey al'fa-aktivnymi veshchestvami)

162-165

There are 5 figures and 5 references, 1 of which is USSR.

Antonova, I. A.; Estulin, I. V.

Gamma-Spectrum Indicator (Indikator gamma-spektra)

166-175

There are 7 figures, 3 tables, and 6 references, 5 of which are USSR.

Antonova, I. A.; Senchuro, I. N.

Automatic Circuit for the Measurement of Weak Currents (Avtomaticheskaya skhema dlya izmereniya slabykh tokov)

176-179

There are 4 figures and 2 references, both of which are USSR.

Card 7/8

AF 1154484

Studies in the Dosimetry of Ionizing Radiation; Collection of Articles (Cont.)

Gusev, N. G.

Calculation of the Maximum Permissible Levels of External Ionizing-
Radiation Flux (Printsipy rascheta predel'no-dopustimyykh urovney vneshnikh
potokov ioniziruyushchikh izlucheniya) 180-191

There are 7 tables and 5 references, 1 of which is USSR.

AVAILABLE: Library of Congress

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PHASE I BOOK EXPLOITATION

443

Aglintsev, Konstantin Konstantinovich

Dozimetriya ioniziruyushchikh izlucheniy (Dosimetry of Ionizing Radiations) 2d ed., rev. Moscow, Gostekhizdat, 1957. 503 p. 7,000 copies printed.

Eds.: Drukarev, G.F. and Orlova, L.I.; Tech. Ed.: Volchok, K.M.

PURPOSE: This book is for physicists and engineers in the field of radiation dosimetry, and for students specializing in radiation dosimetry.

COVERAGE: This second edition of "The Dosimetry of Ionizing Radiation" is revised and enlarged in order to bring the book up to date. New chapters were introduced on scintillation, chemical, and calorimetric methods of dosimetry, including electronic registration of radiation. In addition, the author gives a description of methods for measuring the activity of radioactive substances. Some information which was included in the first edition and is now obsolete

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Dosimetry of Ionizing Radiations

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was eliminated from the second edition. Chapters on the application of dosimetry to geophysics, and on the biological effect of ionizing radiation, were omitted as they could not be given sufficient coverage. There are 95 tables, 375 figures, and 279 references, 66 of which are Soviet, 192 English, 20 German, and 1 Danish.

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AVAILABLE: Library of Congress	
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21(3)

SOV/112-59-3-5251

Translation from: Referativnyy zhurnal. Elektrotehnika, 1959, Nr 3, p 135 (USSR)

AUTHOR: Aglintsev, K. K., Balon, Z. P., Dzhelepov, B. S., Karavayev, F. M.,
Karamyan, A. S., Konstantinov, A. A., Ostromukhova, G. P.,
Prokof'yev, P. T., Rusinova, S. A., Sumbayev, O. I., Khol'nova, Ye. A.,
Shestopalova, S. A., Yudin, M. F., and Yaritsyna, I. A.

TITLE: Metrology of Penetrating Radiations
(Metrologiya pronikayushchikh izlucheni)

PERIODICAL: V sb.: Atomn. energiya v mirnykh tselyakh. Gosenergoizdat,
1957, pp 145-181

ABSTRACT: Projects are described of the Vsesoyuznyy nauchno-issledovatel'skiy
institut metrologii (All-Union Scientific-Research Metrology Institute) imeni
D. I. Mendeleyev on standardization of measures in the ionizing-radiation
field, and on the construction of standard and reference outfits for reproducing
the fundamental units in the whole range of energies and intensities of radiations
of all types. The following outfits are described: (1) a standard reproducing

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Metrology of Penetrating Radiations

the roentgen in the range of 40-300 Kev; (2) a reference outfit for measuring in roentgens of electromagnetic-radiation doses having the quantum energy of 300-1,500 Kev; (3) an outfit for measuring in roentgens the electromagnetic-radiation doses with quantum energy of 3-20 Kev with an error of 1%; (4) two standard outfits for measuring radium gamma-equivalents; (5) differential lead-ball gamma-calorimeters for measuring the activity of various preparations on the basis of their gamma radiation; (6) an isothermal calorimeter operating on the principle of liquid-nitrogen evaporation for measuring the activity of beta preparations; (7) a differential alpha-calorimeter for measuring the activity of radium preparations. An activity-measurement method by counting the number of particles emitted by a preparation is being developed in two directions: counting of particles in a definite solid angle and the same in the total solid angle by means of " 4π -counters." The beta-particle counter within a definite angle permits measuring preparations with an activity of 10^{-8} - 10^{-5} curie with an error of 4-6%. Two alternate designs of " 4π -

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counters" are described. One of them permits measuring beta preparations with an activity of 10^{-10} - 5×10^{-8} curie with an error of 2-4%, and the second, 5×10^{-11} - 5×10^{-7} curie with an error of 1-3%. The outfits have been built for measuring neutron streams from 10^8 down to a few tens of neutrons per sec. A gamma-spectrometer "Elotron" with an improved focusing has been built for investigation of gamma spectra in the energy range of 600-3,000 Kev. To conduct investigations in the range of 120-1,300 Kev, a 2-meter long crystal-diffraction gamma-spectrometer of the Dumond spectrometer type has been built. Also, a magnetic spectrometer analyzing photoelectrons has been built for the range of 200-700 Kev. Measuring the half-life from a few hours to a few years is made by two methods: the method of successive measurements of gamma-equivalent preparations and the differential-chamber method. The results of half-life measurements for a number of isotopes are tabulated.

N.G.Z.

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AGLINTSEY, K.K.
 AUTHOR: AGLINTSEY, K.K., MITROPALOV, V.V., SMIRNOV, V.V. PA - 2195
 TITLE: On the real electron spectra in ionization chambers. (Russian).
 PERIODICAL: Atomnaya Energiya, 1957, Vol 2, Nr 1, pp 66 - 68.
 Received: 3 / 1957 Reviewed: 3 / 1957

ABSTRACT: The dose measurements in B and γ radiation fields are based on the use of ionization chambers or on some indicators gauged by ionization chambers. In the practical dosimetry of γ rays the "thinable chambers" are especially widely used, in which ionization of the gas is almost exclusively caused by electrons. These electrons are knocked out of the chamber walls during the absorption of γ rays. According to the theory developed by BRAGG and GRAY ionization of the gas in the chamber is connected with the radiation energy absorbed in the walls by the following relation: $Q = \Delta E / s \epsilon$. Here Q denotes the number of ion pairs produced in 1 cm³ of the gas in the chamber, s denotes the ratio (slowing down capacity of the wall material/slowng down capacity of the gas), ϵ ionization work. The relation mentioned here is realized sufficiently in a perfect gas if the following conditions are satisfied: a) the volume occupied by the gas can be regarded as a small cavity in the material of the wall, b) the nuclear charge number of the walls and of the gas differ little from each other, c) the radiation field can be regarded as uniform at all points of the chamber. In practice these conditions are not fully satisfied and the application of the theory of BRAGG-GRAY

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On the real electron spectra in ionization chambers.

may therefore lead to certain inaccuracies. The degree of inaccuracy cannot be estimated by this theory. The authors endeavor to investigate the electron spectra in ionization chambers and counting tubes systematically. These spectra were experimentally investigated by means of a magnetic spectrometer which worked according to the retror principle. The investigation of angular distribution was also discussed in short. The construction of the spectrometer and of the system of collimators permitted an investigation of the electron spectra at angles of 0° , 15° , 30° , 60° , 90° and 180° . As sources of the γ rays the radioactive isotopes Co^{60} , Cs^{137} , and RaTh were used. Two diagrams illustrate the spectra of the electrons which have been knocked out of the target at angles of 0° , 15° , 30° , and 60° . A further diagram shows analogous curves for a RaTh source in the energy interval of from 1000 to 2600 keV if the electrons are emitted at angles of 0° , 15° , and 30° . A fourth diagram illustrates the amount of ionization caused by the electrons knocked out at different angles.

From the data obtained here the energy spectrum of the electrons as well as the data for the computation of the efficiency of

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On the real electron spectra in ionization chambers.
chambers and counting tubes can easily be determined.

ASSOCIATION: Not given

PRESENTED BY:

SUBMITTED:

AVAILABLE: Library of Congress.

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AGLINTSEV, K.K., prof. doktor tekhnicheskikh nauk; PERUMOVA, N.D., doktor
meditsinskikh nauk

"Principles of radium therapy" by A.V.Kozlova. Reviewed by K.K.
Aglintsev, N.D.Perumova. Vop.onk. 3 no.4:496-499 '57. (MIRA 10:11)
(RADIUM--THERAPEUTIC USE)

AGLINTSEV, K.K.; KARAMYAN, A.S.

Metrological work in the field of ionizing radiation. Izv. tekhn. no.6:
85-91 N-D '57. (MIRA 10:12)

(Ionization--Measurement)

AGLINTSEV K.K.

AUTHOR: None Given

25-12-18/39

TITLE: Isotopes Serve Science (Izotopy sluzhat nauke)

PERIODICAL: Nauka i Zhizn', 1957, # 12, pp 25-29 (USSR)

ABSTRACT: The international conference on the use of radioactive isotopes was held in Paris in September 1957. The Soviet delegation of 61 Soviet scientists was headed by A.V. Topchiyev, Senior Scientific-Secretary of the USSR Academy of Sciences. The Soviet scientist A.M. Kuzin lectured on radio isotopes and biological research. Of a total of 206 reports,

/ Isotopes Serve Science

25-12-19/59

so-called heteropolycompounds, used for the manufacture of antibiotics as well as for the separation (fission) and cleaning of radioactive isotopes. A.P. Vinogradov reported on studies of the isotopic composition of the earth's crust and meteorites. There are 2 drawings.

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A052/A001

Translation from: Referativnyy zhurnal, Elektrotehnika, 1959, No. 12, p. 150,
24939

AUTHOR: Aglintsev, K.K.

TITLE: Dosimetric Characteristics of Emitters

PERIODICAL: Tr. Vses. n.-i. in-ta metrol., 1957, No. 30 (90), pp. 5-8

TEXT: Possibilities of determining the relation between the activity of a compound and its dose of radiation are considered. Dosimetric characteristics can be determined only when the following physical properties of isotopes have been determined: the maximum energy and the form of β -spectrum, wavelengths and the relative intensities of γ -spectra lines, the number of quanta per decay, the half-life. For a transition from absolute activity or from a full emission of a compound to the outer emission it is necessary to know the sizes of the compound, density and the effective atomic number of the substance it consists of; density, thickness and chemical composition of its shell; and spectral sensitivity of the measuring equipment used. X

N.G.Z.

Translator's note: This is the full translation of the original Russian abstract.
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AGLINTSEV, K.K.; KHOL'NOVA, Ye.A.

Differential calorimeter for measuring the activity of pre-
parations according to gamma radiation. Trudy VNIIM no.30:25-
36 '57. (MIRA 12:1)
(Calorimeters) (Gamma rays--Measurement)

AGLINTSEV, K.K.; KARAVAYEV, F.M.

Study of the standard arrangement for measuring gamma equivalents
of radioactive preparations. Trudy VNIIM no.30:37-52 '57.
(MIRA 12:1)

(Gamma rays---Measurement)

AGLINTSEV, K.K.; BALON, Z.P.

Effect of diaphragming X rays in a standard arrangement on their
reproduction and transfer. Trudy VNIIM no.30:76-86 '57.
(MIRA 12:1)

(X rays--Equipment and supplies)

AGLINTSEV, K.K.; OSTROMUKHOVA, G.P.; YUDIN, M.F.

Model unit for roentgen measurement of gamma radiation with
quanta energies up to 1.5 Mev. Trudy VNIIM no.30:109-116
'57. (MIRA 12:1)
(Gamma rays--Measurement) (Ionization chambers)

AGLINTSEV, K.K.,
FROLOV, Yu.S., otvetstvennyy red.; ZHAVORONKOV, N.M., red.;
red.; ALEKSEYEV, B.A., red.; BOCHKAREV, V.V., red.; LESHCHINSKIY, N.I.,
red.; MALKOV, T.P., red.; SINITSYN, V.I., red.; POPOVA, G.L., red.;
NOVICHKOVA, N.D., tekhn.red.

[Obtaining isotopes. Heavy gamma-units. Radiometry and dosimetry.
Proceeding of the Conference on the Use of Radioactive and Stable
Isotopes and Radiation in the National Economy and in Science]
Poluchenie izotopov. Moshchnye gamma-ustanovki. Radiometriya i
dozimetriya; trudy Vsesoyuznoi nauchno-tekhnicheskoi konferentsii po
primeneniiu radioaktivnykh i stabil'nykh izotopov i izlucheni v
narodnom khoziaistve i nauke. Moskva, Izd-vo Akad.nauk SSSR, 1958.
(MIRA 11:6)
293 p.

1. Vsesoyuznaya nauchno-tekhnicheskaya konferentsiya po primeneniiu
radioaktivnykh i stabil'nykh izotopov i izlucheni v narodnom
khozyaystve i nauke. 1957.
(Isotopes). (Gamma rays--Equipment and supplies) (Radiation--Dosage)

AGLINTSEV, K.M., KATAVATOV, F.M., RADON, I.P., ROZENTHALOV, A.A., OSTROVNIKOVA, G.P.
EPOL'KOVA, Ye.M., Leningrad

"Standardizing X-rays and nuclear radiation" (Section X)

report submitted for Measurement and Automation, Scientific Society for (Hungarian)
Intl Measurements Conference - Budapest, Hungary, 24-30 Nov 58

89-4-5-8/26

AUTHORS: Aglintsev, K. K., Gorobets, A. N., Kasatkin, V. P.,
Kondakova, E. S.

TITLE: Dosimetric Characteristics of the **Composite** Fission Fragments
of Uranium (Dozimetricheskiye kharakteristiki smesi oskolkov
deleniya urana)

PERIODICAL: Atomnaya Energiya, 1958, Vol. 4, Nr 5,
pp 461 - 464 (USSR)

ABSTRACT: The dosimetric characteristics are determined by computation
and are compared with the available experimental data. Thus
satisfactory correspondence is reached. From the diagrammatical
representation the following limiting values can be taken:

I. Total activity of the uranium fission fragments:

$$\begin{aligned} \text{a) } t_0 (\text{radiation time}) &= 60 \text{ d} \\ \tau (\text{cooling time}) &= \begin{cases} 20 \text{ d} & \sim 260 \text{ C/kW} \\ 400 \text{ d} & \sim 8 \text{ C/kW} \end{cases} \end{aligned}$$

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Dosimetric Characteristics of the Composite Fission Fragments of Uranium

b) $t_0 = 100 \text{ d}$

$$\tau = \begin{cases} 20 \text{ d} \\ 400 \text{ d} \end{cases} \quad \begin{matrix} \sim 300 \text{ C/kW} \\ \sim 11 \text{ C/kW} \end{matrix}$$

c) $t_0 = 150 \text{ d}$

$$\tau = \begin{cases} 20 \text{ d} \\ 400 \text{ d} \end{cases} \quad \begin{matrix} \sim 380 \text{ C/kW} \\ \sim 19 \text{ C/kW} \end{matrix}$$

II. γ -equivalent of the mixture of uranium fission fragments:

a) $t_0 = 60 \text{ d}$

$$\tau = \begin{cases} 20 \text{ d} \\ 400 \text{ d} \end{cases} \quad \begin{matrix} \sim 40 \text{ g radium equivalent/kW} \\ \sim 0.1 \text{ g radium equivalent/kW} \end{matrix}$$

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There are 3 figures, 3 tables and 4 English references.

89-4-5-8/26

Dosimetric Characteristics of the Composite Fission Fragments of Uranium

SUBMITTED: September 5, 1957

AVAILABLE: Library of Congress

1. Fission fragments--Analysis 2. Uranium--Fission

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21(1)

AUTHORS:

Aglintsev, K. K., Mitrofanov, V. V., Smirnov, V. V.

SOV/89-5-5-12/27

TITLE:

The Relative Effectiveness of Ionization Chambers Made of Various Materials (Otnositel'naya effektivnost' ionizatsionnykh kamer iz razlichnykh materialov)

PERIODICAL:

Atomnaya energiya, 1958, Vol 5, Nr 5, pp 566-568 (USSR)

ABSTRACT:

The thimble-ionization chambers were made from plexiglass, aluminum, copper, cadmium, and lead. The angular distribution and the energy spectrum of the secondary electrons were experimentally determined. Secondary electrons are produced by the interaction between the γ -radiation of Cs^{137} (662 keV) and Co^{60} (1170 and 1330 keV) and the various materials of which the walls of the ionization chamber are made. The secondary electrons were measured by means of a 270° magnetic spectrometer (Ref 1). An additional sluable device made it possible to carry out separate measurements of the secondary electrons emitted at angles of 0, 15, 30, 45, 60, 80, 105, 130, 150, 165 and 190° .

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The relative effectiveness of the thimble-ionization chambers

SOV/89-5-5-12/27

The Relative Effectiveness of Ionization Chambers Made of Various Materials

was determined as amounting to:

E_γ in keV	Material of the walls of the chamber	Relative effectiveness
1250	plexiglass	$1,0 \pm 0,1$
	Al	$1,0$
	Cu	$1,1 \pm 0,1$
	Cd	$1,3 \pm 0,2$
	Pb	$1,6 \pm 0,2$
662	plexiglass	$1,0 \pm 0,1$
	Al	$1,0$
	Cu	$1,5 \pm 0,2$
	Cd	$1,9 \pm 0,3$
	Pb	$2,7 \pm 0,4$

The values obtained, with the exception of those for Pb, agree well with the data supplied by reference 2. The effect of the ionization by electrons scattered on the opposite wall of the chamber is taken into account by the above data. There are 3 figures, 2 tables, and 2 references.

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